Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A no-arbitrage-based system for valuing one or more ~~and managing the risk of a plurality of~~ credit instruments, said system comprising:

a) a database for storing credit instrument data;

b) a first calibration engine connected to said database, wherein said first calibration engine generates calibration parameters from said credit instrument data and current market data, said credit instrument data comprising market data;

c) a second pricing engine connected to said database and said first calibration engine, wherein said second pricing engine is adapted to value said one or more credit instruments according to no-arbitrage financial principles, wherein at least one of a net present value and a par-spread is calculated for each of said one or more credit instruments using current market data ~~calculate the net present values and a plurality of valuation metrics for said plurality of credit instruments by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments~~;

d) a third engine connected to said second pricing engine for performing simulation-based computations in which a plurality of scenarios are applied to market data to generate a plurality of valuation and exposure measures;

e) a fourth risk engine connected to said second pricing engine and said third engine for computing a plurality of risk and reward metrics from said valuation and exposure measures; and

f) a report generator connected to said fourth risk engine for generating reports for use in managing risk.

2. (currently amended) The system as claimed in claim 1, wherein at least one of said ~~plurality of~~ one or more credit instruments is a loan.

3. (original) The system as claimed in claim 1, further comprising at least one input data module for storing data relating to credit instruments in said database.

4. (original) The system as claimed in claim 1, further comprising a portfolio hierarchy server.

5. (currently amended) The system as claimed in claim 1 ~~A calibration engine for use in a system for valuing and managing the risk of a plurality of credit instruments~~, wherein said first calibration engine ~~comprising~~ comprises:

a) a first module for generating ~~a plurality of~~ one or more basis instruments from input data relating to said ~~plurality of~~ one or more credit instruments, wherein said input data comprises at least one of prices, ratings, sectors, and terms and conditions;

b) a second module for generating a first term structure of risk-free zero prices and a risk-neutral process for interest rates from said one or more ~~plurality of~~ basis instruments;

c) a third module for generating one or more basic spread matrices from said ~~plurality of~~ one or more basis instruments and said first term structure of risk-free zero prices;

d) a fourth module for generating a second term structure of risk-neutral transition matrices and at least one smoothed credit spread matrix using said first term structure of risk-free zero prices, said module also adapted to develop generators using a transition matrix manager;

e) a fifth module for generating a third term structure of risk-neutral transition matrices for a specific named obligor from said at least one smoothed credit spread matrix, said first term structure of risk-free zero prices, and said second term structure of risk-neutral transition matrices; and

f) a sixth module for generating a plurality of spread volatility matrices.

6. (original) The calibration engine of claim 5, wherein at least one of said modules of said calibration engine generates data subsequently stored in a Mark-to-Future cube.

7. (currently amended) The system of claim 1 ~~A pricing engine for use in a system for valuing and managing the risk of a plurality of credit instruments~~, wherein said second pricing engine ~~comprising~~ comprises:

a) a first module for defining a state space;

b) a second module for generating a state space by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments;

c) a third cash flow generation module for generating cash flows for said plurality of credit instruments, whereby said credit instruments may be subject to different prepayment or credit state assumptions; and

d) a fourth module connected to said third cash flow generation module for generating a plurality of valuation attributes from said generated cash flows.

8. (New) The system of claim 1, wherein the net present value of a credit instrument is calculated by performing a valuation of a plurality of cash flows for the credit instrument.

9. (New) The system of claim 8, wherein said valuation of said plurality of cash flows is performed using a lattice valuation technique.

10. (New) The system of claim 8, where said valuation of said plurality of cash flows is performed using a Monte Carlo simulation technique.

11. (New) The system of claim 1, wherein the par spread of a credit instrument is calculated by determining one or more spreads such that the net present value of the credit instrument equals a specified value.